

US EPA ARCHIVE DOCUMENT

Partnerships and Solutions: The Middle Atlantic Nonpoint Source Success Story



Photos by Sue Millin, Washington County Conservation Department, Wisconsin

Polluted Runoff

Nonpoint source (NPS) pollution occurs when rainfall, snowmelt, or irrigation travels over land or through the ground; picks up pollutants, and deposits them into rivers, lakes, and coastal waters or introduces them into ground water. Imagine the path taken by a drop of rain from the time it hits the ground to when it reaches a river, ground water, or an ocean. Any pollutant it picks up on its journey can become part of the NPS problem. The most significant sources in the Mid-Atlantic Region occur from abandoned mines, agriculture, and urban land uses.



The Mid- Atlantic Region consists of District of Columbia, Delaware, Maryland, Pennsylvania, Virginia and West Virginia. NPS pollution is widespread because it can occur any time activities disturb or change the land or water. Farming, harvesting trees, grazing animals, septic systems, recreational boating, paved roads, buildings, home construction, physical changes to stream channels, and habitat degradation are sources of NPS pollution.



Extent of Nonpoint Source Pollution

NPS pollution constitutes the Nation's largest source of water quality problems. It is the main reason that approximately **40 percent of our surveyed rivers, lakes, and estuaries are not clean enough to meet basic**



uses such as fishing or swimming. NPS pollution is happening in our own backyard.

In our region over 20,000 miles of streams, rivers and creeks are impaired or polluted. **Of these assessed impaired waters, 88 percent of water pollution is due to NPS pollution.**

The Early History

In 1987, Congress established the NPS Pollution Management Program under Section 319 of the Clean Water Act (CWA). This program provides states with grants to implement NPS pollution controls to achieve goals that are described in NPS pollution management program plans.

EPA/State Partnership

States have to meet two basic requirements to be eligible for a Section 319 funding. First, the state must develop and obtain EPA approval of a NPS pollution assessment report. In the assessment report, the state or territory identifies waters impacted or threatened by NPS pollution. The state also describes the categories of NPS pollution, such as agriculture, urban runoff, or forestry, that are causing water quality impairment.

Second, a state or territory must develop and obtain EPA approval of their NPS pollution management program plan. This program becomes the framework for controlling NPS pollution, given the existing and potential water quality problems described in the NPS pollution assessment



report. **By 1991, all states in our region had received approval of their NPS Pollution Management Programs.**

Recent History

In February 1998, the President announced in his State of the Union Address, the new Clean Water Action Plan — an initiative to speed the restoration of the nation's precious waterways. The principle focus of the new plan was teamwork — getting the

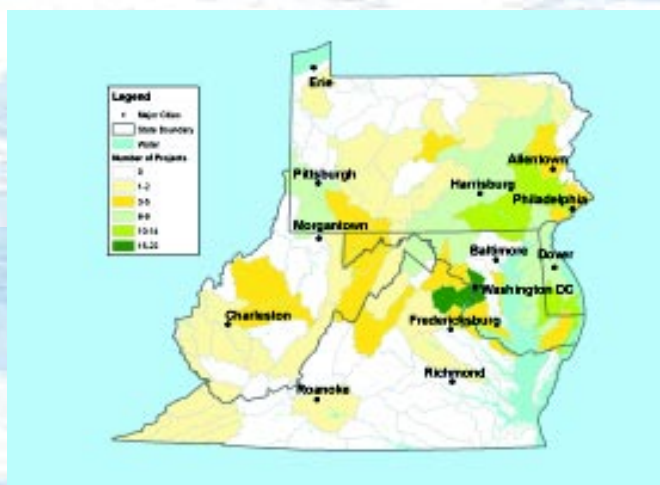
myriad of Federal, state, and local governments, environmental partnerships, business and industry groups to tackle the nation's remaining water pollution problems as a team.

In 1999, Congress doubled (from \$100 million to \$200 million) the amount awarded under Section 319 nationally. The Clean Water Action Plan required that, beginning in Fiscal Year 2000, that EPA would only award the additional 319 funds exceeding \$100 million to States providing they updated the NPS management program plans.



By January 2001, all states had updated their NPS management program plans. As of fiscal year 2002, Congress has appropriated over \$1.3 billion nationally to the EPA to fight NPS pollution. EPA provides funding and technical assistance to states through a regional office structure. **Since 1988, EPA has provided over \$150 million to states in the Middle Atlantic Region.**

Map of current Mid-Atlantic 319 Watershed Projects



Current Developments

With congressional appropriations of over 20 million dollars per year to our region and management plans that provide a road map for restoring and protecting our waterways, measurable progress is being achieved.

Region III Nonpoint Source Success Stories

Delaware: Unusual Partnerships

The Coverdale community had contaminated drinking water caused by malfunctioning septic systems and improperly placed wells. In addition, living conditions in the summer camp and now permanent community were deplorable. Through a partnership lead by DNREC NPS Program, by September 2000, with the help of many community organizations such as, the Delaware Housing Authority, Greenwood Trust Bank and Sussex Conservation District, approximately 50 wells and 100 septic systems were replaced. Through the help of these groups the community has not only improved water quality, but also the standard of living for many of the Coverdale residents.



District of Columbia: Cleaning up Watts Branch

Watts branch, a tributary to the Potomac River, "Our Nations River", is polluted. The causes of the water quality problems are storm



water runoff and illegal dumping. The District of Columbia, in partnership with the USDA-NRCS and USF&W has stabilized nearly 2,000 feet of eroding streams. In addition, volunteer organizations and civic groups have helped with stream beautification and cleanup. In a little over



one year; Parks and People, a local NGO organized more than 4,000 volunteers to collect over 7,000 bags of trash and haul away twenty-six abandoned vehicles. In addition, signs and surveillance cameras have been installed to deter further dumping. Watts Branch is on its way back to becoming a clean river.

Maryland: Partners Combating Agricultural Runoff

Antietam Creek, identified as transporting the 8th highest loading of agricultural pollutants to the Chesapeake Bay, became a priority for the Washington County



Conservation District and its partners.

Implementation of 3,600 conservation plans and projects include: installation of agricultural manure management systems, stream fencing, livestock watering facilities, stream restoration projects and widespread education efforts.



Recently, the Maryland Department of the Environment has shown that stream water quality and the creek's riparian

area have improved.

Pennsylvania: The Lititz Watershed

Urban stormwater runoff, nitrogen and phosphorus loadings are responsible for degrading Lititz Run. Located in Warwick Township the local government has worked closely with the Lititz Run Watershed Alliance to improve water quality through combined techniques in natural resource management, land use planning, education and community involvement in addressing nonpoint source pollution. Projects include agricultural management plans throughout the watershed, creation of a GIS database, water quality monitoring network, streambank stabilization, establishment of forested riparian buffers along the stream and a major public education program. Tangible results include improvement in water quality as demonstrated in the monitoring program established by faculty and students from the local high school, sighting of a Black Crowned Night Heron at the created wetland of the regional constructed wetland and improved wildlife habitat along a restored section of the stream.

Virginia: Cleaning up Acid Mine Drainage

Cabin Branch Pyrite Mine operated along Quantico Creek from 1890 till the 1920s, when it was abandoned. Highly acidic mine tailings and toxic discharge from improperly sealed mine shafts have polluted the water. Now a part of Prince William Forest Park, the area has become a priority of the National Park Service. Reclamation components include diverting storm waters away from mine sites and sealing mine shafts. In addition, 150 volunteers helped plant 5000 native shrubs and trees. The fish community downstream has increased both in taxa and number. The site is used as an educational tool to help inform people about acid mine drainage.

West Virginia: North Fork Water Quality Restored

The North Fork and South Fork of the South Branch of the Potomac River had been identified by the WVDEP as polluted with high levels of bacteria and sediments originating mostly from agricultural sources.

The watershed became a major priority of the WV Conservation Partnership for restoration. The



result, over 85% of the farmers in the watershed have implemented agricultural Best Management Practices. The funding sources for this project have been EPA Nonpoint Source Section 319



grants, the State Revolving Fund Loan program, state grants and USDA PL-534 cost-sharing. Recent

water quality monitoring studies have determined that the stream now meets the Federal Clean Water Act goal of fishable and swimmable.

Mid-Atlantic Environmental Protection Agency
Non Point Source Program
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Contact Fred Suffian, NPS Team Leader
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